



## Unit 2: BIM TECHNOLOGY

An AGC Construction Learning Tool

April 8, 15, 22, and 29, 2010 (total class time 16 hours)  
Thursdays, 3:00 - 7:00 p.m.

**This is the second course in the AGC BIM Education Program.**

BIM Technology is designed specifically for construction professionals who want to establish a solid process for selecting BIM tools and investigate the significant impact models have for improving estimating, scheduling and coordinating. The goal of the BIM Technology course is to help participants become BIM champions within their organizations.

The benefits:

- Find out who the major market players are.
- Determine the best products to support particular project phases.
- Explore how BIM processes for QTO, shop drawing and fabrication, and construction scheduling can help bring projects in on time and on budget.
- Track how models are maintained, the implications of team member roles, file format requirements, interoperability, and technology limitations.
- Determine how visualizing construction sequencing a project at any time can improve efficiency.
- Gain an understanding of the power of digital visualization for effectively coordinating onsite activities

Those who benefit include contractors, building developers, owners, managers, supervisors, architects, engineers, and construction product manufacturers. Students in the architecture, engineering, and construction industry will also greatly benefit from this training.

**Register TODAY**

**Unit 2: BIM Technology**

<http://events.agcstl.org/imispublic>

or complete registration on reverse side

**REGISTRATION DEADLINE: March 31, 2010**

The logo for the BIM Education Program is enclosed in a light yellow square border. It features the letters 'BIM' in a large, bold, black serif font. Below 'BIM', the words 'EDUCATION' and 'PROGRAM' are stacked in a smaller, black, sans-serif font, with 'PROGRAM' being all caps and spaced out.

**Session 1— Content covered April 8 & 15**

**BIM Technology, Capabilities, Process, and Tools**

**Module 1: Technology**

- Identify five BIM benefits
- Explain what parametric modeling means
- Distinguish between a traditional and BIM approach
- Associate tool classes and phases
- Match BIM tools and functions
- Determine if tools support the BIM process

**Module 2: Capabilities**

- Define the federated model process and describe the characteristics
- Differentiate at least five BIM tools by function and file format
- Identify at least one developer source for preliminary design and authoring tools

**Module 3: Process**

- Describe two functions of BIM analysis tools
- Explain goals, needs, how to's, & results for five analysis tools
- Explain a process for creating and using a shop drawing and fabrication model
- Outline a process for estimating and scheduling using a QTO tool
- Contrast two approaches for construction scheduling

**Module 4: Tools**

- Develop questions for selecting file sharing tools
- Describe strategies for specifying with BIM
- Explain a process for selecting BIM software
- Create a checklist for selecting BIM hardware

**Session 2— Content covered April 22 & 29**

**Estimating/QTO, Scheduling, and Coordination**

**Module 1: Conceptual Estimating and QTO**

- Identify the cost drivers and major characteristics of a good model
- Describe what should and should not be modeled
- Identify five coordination points of a modeling process
- Outline processes for exporting and importing quantity information

**Module 2: Scheduling**

- Differentiate construction planning and scheduling activities
- Map out how 4D models analyze and evaluate schedules
- Explain how to Identify what project components should be modeled
- List six uses of 4D Technology
- Define bi-directional linking and identify tools with this functionality
- Define how 3D models are maintained with current information

**Module 3: Coordination and Interoperability**

- Map a sequence for coordinating the creation of models
- Explain a five step coordinating process
- List three characteristics of best practice coordination that account for the status of model information
- Develop the basis for a BIM Execution Plan for design and shop drawing levels of coordination that include:
  - BIM application tools
  - Interoperability and file formats
  - Model content responsibility
  - Time schedule
  - Naming conventions for files and attributes in models
  - Methods of file sharing, collaboration and coordination
  - Technical considerations

**Dates:** Thur. Apr. 8, 15, 22 and 29, 2010

**Time:** 3:00 - 7:00 p.m.

**Location:** Construction Training School  
2nd Floor Assembly Room

**Cost:** \$300 AGC Member  
\$600 Non-Member

**Lead Instructors:**

Corey Bell, *S.M. Wilson*  
Scott Green, *Tarlton Corp*  
Adam Lega, *McCarthy*  
Tomislav Zigo, *Clayco*

**Assisted by BIM Committee**

**Register online at <http://events.agcstl.org/imispublic>**

*If you need a username or password or have questions regarding the online registration process, call Kathy Givens at (314) 480-3172.*

**Or fax to: (314) 781-2874**

**Company:** \_\_\_\_\_

**Names of Attendees:** \_\_\_\_\_

**Contact Name:** \_\_\_\_\_

**Email Address:** \_\_\_\_\_

**REGISTRATION DEADLINE: March 31, 2010**

**More info contact Joanne Engel, [jengel@stl-cts.org](mailto:jengel@stl-cts.org) or (314) 644-1525**